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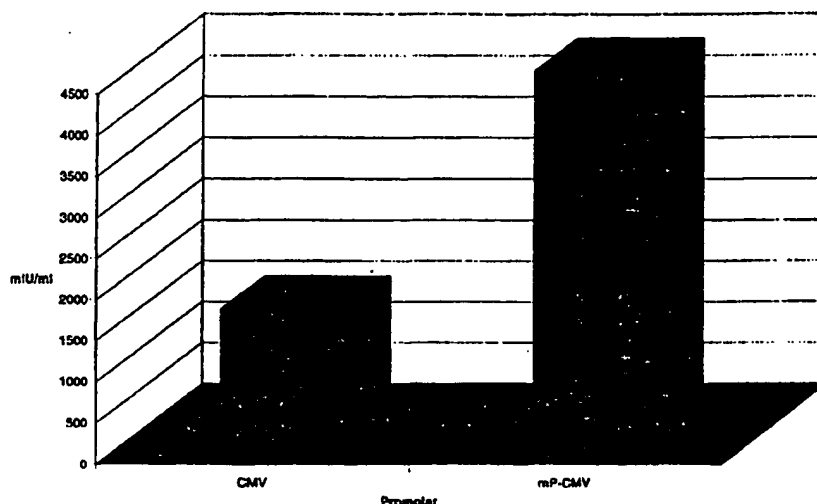
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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(21) International Application Number: PCT/US99/24694 (22) International Filing Date: 19 October 1999 (19.10.99) (30) Priority Data: 60/104,871 19 October 1998 (19.10.98) US (71) Applicant (for all designated States except US): POWDERJECT VACCINES, INC. [-/US]; 585 Science Drive, Madison, WI 53711 (US). (72) Inventor; and (75) Inventor/Applicant (for US only): FULLER, James, T. [-/US]; 585 Science Drive, Madison, WI 53711 (US). (74) Agent: MCCRACKEN, Thomas, P.; PowderJect Technologies Inc., 6511 Dumbarton Circle, Fremont, CA 94555 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> (88) Date of publication of the international search report: 27 July 2000 (27.07.00)	

(54) Title: **MINIMAL PROMOTERS AND USES THEREOF**

GMT of Anti-HBeAg Antibodies (mIU/ml) At Six Weeks Post-Prime (Four Experiments @ 8 Mice per Group)



(57) Abstract

Minimal promoter sequences are described. Reagents including a nucleic acid molecule which contains these minimal promoter sequences are also described. Methods for constructing these reagents, and methods for using these reagents are also described.

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INTERNATIONAL SEARCH REPORT

International Application No.
PCT/US 99/24694

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 A61K48/00 C12M1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 98 20041 A (OKLAHOMA MED RES FOUND) 14 May 1998 (1998-05-14)</p> <p>page 2, line 7 -page 3, line 11 page 7 -page 8; example 1 figure 4 page 5, line 13 -page 6, line 28 page 7, line 4 - line 21; claims 1-3</p> <p style="text-align: center;">— -/-</p>	<p>1,7-9, 12-17, 22,23, 35-37</p>



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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Date of the actual completion of the international search

2 May 2000

Date of mailing of the international search report

17/05/2000

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/24694

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>MOHAMMADI ET AL: "EFFICIENT TRANSGENE REGULATION FROM A SINGLE TETRACYCLINE-CONTROLLED POSITIVE FEEDBACK REGULATORY SYSTEM" GENE THERAPY, vol. 5, January 1998 (1998-01), pages 76-84, XP000891454 page 775, paragraph 2 -page 79, paragraph 1 page 81, paragraph 1 -page 82, paragraph 4 page 77; figure 1</p>	1,9-12, 23-25, 36-38
X	<p>HORMANN ET AL: "RAPID RETROVIRAL DELIVERY OF TETRACYCLINE-INDUCIBLE GENES IN A SINGLE AUTOREGULATORY CASSETTE" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, USA, vol. 93, 1996, pages 5185-5190, XP002136742 page 5185, paragraph 6 -page 5185, paragraph 1 page 5186, paragraph 10 -page 5187, paragraph 2 page 5186; figure 1 page 5189, paragraph 7 -page 5190, paragraph 2</p>	1,9-12, 23-25, 36,37
A	<p>WO 98 37185 A (HU SHI XUE ;UNIV TEXAS (US); XU HONG JI (US); ZHOU YUNLI (US); LOG) 27 August 1998 (1998-08-27) page 3, paragraph 4 - paragraph 5 page 29, paragraph 3</p>	22
A	<p>BOEHM WALTRAUD ET AL: "DNA vector constructs that prime hepatitis B surface antigen-specific cytotoxic T lymphocyte and antibody responses in mice after intramuscular injection." JOURNAL OF IMMUNOLOGICAL METHODS 1996, vol. 193, no. 1, 1996, pages 29-40, XP002136743 ISSN: 0022-1759 page 30, right-hand column page 31, paragraph 2 -page 33, paragraph 3 page 33, paragraph 7 page 36, paragraph 1 -page 37, paragraph 2</p>	2
A	<p>WO 89 01036 A (CELLTECH LTD) 9 February 1989 (1989-02-09) page 3, line 6 - line 23</p>	

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 99/24694

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
Remark: Although claims 13-17 completely, and 12, 18-25 partially, are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

information on patent family members

International Application No

PCT/US 99/24694

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9820041 A	14-05-1998	AU 5431798 A EP 0937104 A	29-05-1998 25-08-1999
WO 9837185 A	27-08-1998	NONE	
WO 8901036 A	09-02-1989	AT 88501 T DE 3880468 A EP 0323997 A JP 2505268 B JP 2500330 T US 5591639 A US 5658759 A	15-05-1993 27-05-1993 19-07-1989 05-06-1996 08-02-1990 07-01-1997 19-08-1997